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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/656,309	09/06/00	CALLEN	<i>Levy</i> DIVER1350-2

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HM12/1106

HUTSON, R	ART UNIT	PAPER NUMBER
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1652  
DATE MAILED:

11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/656,309	CALLEN ET AL.
	Examiner	Art Unit
	Richard G Hutson	1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 05 April 2001.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-51 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 1-51 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) All    b) Some \* c) None of:

        1. Certified copies of the priority documents have been received.

        2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

        3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    \* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-17, 29 and 30, drawn to an isolated nucleic acid encoding a polypeptide having polymerase activity and method of expressing said nucleic acid, classified in class 435, subclass 194.
- II. Claims 18-26, drawn to a purified polymerase polypeptide, classified in class 435, subclass 194.
- III. Claims 27-28, drawn to a purified antibody that binds a polymerase polypeptide, classified in class 530, subclass 387.1.
- IV. Claims 31-42, drawn to a method of generating a variant of a nucleic acid which encodes a polymerase polypeptide, classified in class 435, subclass 440.
- V. Claims 43-47, drawn to a computer system and a data storage device wherein said storage device has stored thereon a nucleic acid sequence, classified in class 702, subclass 20.
- VI. Claims 48-50, drawn to a method of identifying a feature in a sequence, classified in class 702, subclass 20.
- VII. Claim 51, drawn to an assay for measuring DNA polymerase activity in a PCR amplification, classified in class 435, subclass 15.

Inventions I, II, III and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different

modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the nucleic acid of group I, the polypeptides of group II and the antibody of group III each comprise a chemically unrelated structure capable of separate manufacture, use and effect. The nucleic acid of group I is comprised of nucleic acid sequence and the polypeptides of Groups II and III are comprised of different amino acid sequences. The DNA has other utility besides encoding protein such as a hybridization probe, and the proteins can be made synthetically. Additionally, the polypeptides can be used to perform specific biological function(s) which are independent of the function(s) of the nucleic acid molecule, such as DNA synthesis or protein binding. The computer system and data storage device of group V is neither made of nucleic acid or amino acid sequence and can be used to perform an unlimited number of analytical and information storage functions which are independent of the molecules of groups I-III.

Inventions IV, VI and VII are unrelated. The inventions of groups IV, VI and VII are independent, as the methods comprise different steps, utilize different products and produce different results.

Inventions I and VI or VII are unrelated. The nucleic acid of group I are unrelated to the methods of groups VI or VII, as they are neither used nor made by the methods of groups VI or VII.

Inventions I and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially

different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the product, of group I, can be used to recombinantly synthesize the encoded polypeptide.

Inventions II and IV or VI are unrelated. The polypeptide of group II are unrelated to the methods of groups IV or VI, as they are neither used nor made by the methods of groups IV or VI.

Inventions II and VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case the product, of group II, can be used in a method to synthesize antibodies.

Inventions III and IV, VI and VII are unrelated. The antibodies of group III are unrelated to the methods of groups IV, VI and VII, as they are neither used nor made by the methods of groups IV, VI and VII.

Inventions V and IV or VII are unrelated. The computer system and a data storage device of group V is unrelated to the methods of groups IV and VII, as it is neither used nor made by the methods of groups IV or VII.

Inventions V and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different

process of using that product (M.P.E.P. § 806.05(h)). In the instant case the product, of group V, can be used in a method of storing nucleotide sequence information.

Because these inventions are distinct for the reasons given above and the search required for Group I through VII is not coextensive, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard G Hutson whose telephone number is (703) 308-0066. The examiner can normally be reached on 7:30 am to 4:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapy Achutamurthy can be reached on (703) 308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



Richard Hutson, Ph.D.  
Patent Examiner  
Art Unit 1652  
November 5, 2001